

ABSTRACT

An integrated magnetic field sensing device includes at least two magnetoresistive elements which are biased in a first direction by an integral conductor and are sensitive to magnetic field components in a direction perpendicular to the first direction. The sensitivity of the device to a magnetic field is adjustable and is related to the level of the bias current. In a current measuring application, two of the magnetic field sensing devices are mounted on opposite sides of and perpendicular to a conductor carrying a current to be measured. In a portable current measuring apparatus, two of the magnetic field sensors are mounted in a housing that assists in locating the magnetic field sensors relative to the conductor carrying the current to be measured.